

PORTABLE MEDICAL RECORDS DEVICE

Background of the Invention

[0001] This invention relates to a secure portable device for storing and accessing patient records.

[0002] Accurate, accessible and shareable health information is a well accepted prerequisite of good healthcare. Patient safety, public safety, continuity of patient care, healthcare economics, clinical research and outcomes analysis are adversely affected by the reduced quality of health information available. The prior art has attempted to solve these problems in the healthcare field in not entirely satisfactory ways. The following patents are illustrative of the prior art attempts at medical record storage.

[0003] Patent 5,832,488 to Eberhardt discloses a computer system and method for programming data of an individual's medical histories on a storage device. The programs are designed to record information on smart cards such as patient identifier and a running medical history plus pharmaceutical information. Patent 6,467,690 to Reeves discloses an electronic storage memory card of a particular type which is capable of having digital binary data stored within its surface and which is easily carried on a person in a wallet or purse.

[0004] Patent 5,731,629 to Woodward discloses a personal data storage device for storing information such as medical records and a system for storing and reading such information from the storage device.

[0005] Also of some interest are U.S. patents 5,932,759 and 5,825,882 and patent publications 2002/0128856 and 2002/0120470.

[0006] Recently, an attempt was made to embed a 32k chip beneath a person's skin with patient information that was uploaded to the chip. The significant disadvantage to this format was that it required surgery with a cost factor and the information on the chip was limited.

[0007] The unique device of this invention is not disclosed or suggested in the prior art and provides a novel solution to medical record problems.

Summary of the Invention

[0008] This invention comprises a portable, secure, self-contained memory device that in combination with MyRECS™ copyrighted software is designed to store, update and display personal medical information. The MyRECS™ device is a small hand carried device which is connectible to the USB port of a computer or reader adapter. Access to the medical information is provided by a unique password. Medical information stored in the device cannot be deleted or changed—it can only be appended.

[0009] The MyRECS™ device stores personal information, emergency contact information along with reports, referral letters, images, medications, immunizations, medical conditions, allergies, surgeries, medical alerts, and any other pertinent information required to treat a person correctly. Each device is registered to a particular individual and the information is kept in a secure encrypted database. In an emergency, if the user is incapacitated, an 800 phone number may be used to unlock the device and view the information.

[0010] Accordingly an object of this invention is to provide a new and improved small, portable memory device for storing medical records.

[0011] Another object of this invention is to provide a new and improved portable, secure, self-contained memory device that functions with software to store, update and display personal medical information.

[0012] A further object of this invention is to provide a new and improved portable storage device for medical records which is accessed by a unique password but may be unlocked in emergencies through a customer service center.

[0013] A more specific object of this invention is to provide a new and improved small portable memory device to store, update, and accurately display personal medical information using a password which information cannot be deleted, only appended and which may be inputted by scanning, keying or downloading.

Brief Description of Drawings

[0014] The above and other objects of this invention may be more clearly seen when viewed in conjunction with the accompanying drawings ~~wherein.~~

[0015] FIG. 1 is a schematic illustration showing aspects and features of an embodiment of the invention~~is a perspective view of the patient memory device, coupling cable and proprietary software.~~

[0016] FIG. 2 illustrates an environment in which an implementation of an embodiment of the invention is used~~is a schematic view of the invention in the form of a flow chart.~~

[0017] FIG. 3 illustrates a small portable memory device, USB extender cable, and CD-ROM in accordance with an implementation of an embodiment of the invention~~is a schematic view of the invention showing the hardware portion of the invention; and.~~

[0018] FIG. 4a, 4b and 4c each respectively illustrate a screenshot in accordance with an implementation of an embodiment of~~are a illustrations of a personal medical record print out from the invention.~~

Detailed Description

[0019] ~~Referring to FIG. 2 of the drawings, this~~In accordance with an implementation of a commercial embodiment of the invention, and as illustrated in FIG. 3,~~comprises a secure a small, portable, hand carried device 10 is provided that with a proprietary software program 11 designed to compile and display a person's medical record 12. The device 10 which is marketed under the name brand MyRECS™ by LMG Marketing and Development Corporation of Ramsey, New Jersey, is approximately the size of a lipstick case, see FIG. 1. Specifically, t~~The device 10 includes~~is about three inches long by ½ inch thick. A ¾ inch cap 13 is mounted over a USB connector at one end and a removable cap that covers the USB connector when the device 10 is not in use and is removable to expose a USB connector or other memory device and reader where dimensions can be as small as one inch square by 1/8" thick.~~

[0020] As further shown in FIG. 3, A~~a~~ USB extender cable 14 and a business card size CD-ROM 15 are also provided. The CD-ROM contains WIN 98 D~~drivers for computer systems with O~~operating systems that are not WINDOW 2000 or XP. The device 10 includes software 11

that is designed to store, compile, update and display a person's medical history.~~unique copyrighted software 11~~ The information is kept in a secure encrypted database. In alternative embodiments, the small, portable, hand carried device can be ~~used in~~ any nonvolatile memory device such as a USB drive, memory stick, digital card and flash memory card ~~and that is read through a standard memory card reader.~~ ~~HIPPA~~HIPAA compliant software may also be included ~~with the proprietary software.~~

[0021] The MyRECS™ device **10** is plugged into the USB port **16** of any PC based computer **17** and the medical history ~~12~~ of the owner is immediately available and viewable. From the patient's perspective, the device **10** is totally portable and can hold up to 48,000 pages or 120 images, or any combination thereof. The capacity of the memory device is only limited by the size of the USB drive, ~~For example, it is believed that 64 MB of memory provides storage for 96,000 pages and 240 images, and 128 MB of memory provides storage for 192,000 pages and 440 images.~~ This eliminates bulky files and folders.

[0022] From the doctor's perspective, the MyRECS™ device **10** will allow any doctor, anywhere, to have all a patient's pertinent medical history available immediately with the patient's permission. This device **10** provides information such as name, address, phone, emergency contact, primary physician contact, medical alerts, allergies, medical conditions, medications (active/inactive), immunizations, blood type, surgeries, medical history, treatments, etc.

[0023] ~~The most significant advantages to having this such patient information readily available to the medical community and insurance companies are the following may include:~~

[0024] A) ~~An increase in proper initial diagnosis of patients from 32% to 90%—a 52% improvement.~~

[0025] B) ~~A reduction in ordering of expensive medical tests ranging up to \$1,500.00 per patient.~~

[0026] C) The prescribing of medications and dosages which are more precise and specific to the patient's medical condition.

[0027] D) ~~A reduction in unnecessary admissions to hospitals.~~

[0028] E) ~~A reduction in patient deaths and complications due to medical errors.~~

[0029] In summary, the MyRECS™ device **10** is a small, portable, hand carried, secure, self-

contained memory device that, in combination with ~~copyrighted~~ software stored therein, is designed to store, compile, update and display a person's medical history ~~12~~. Healthcare providers may access this stored medical information only when given a unique password by the patient. Medical information stored in the device **10** cannot be deleted or changed. It can only be appended. Reports showing added information, which are date and time stamped, and also show the name of the party adding the information. It is believed that ~~the~~ the device meets all legal privacy requirements.

[0030] The combination of software and hardware makes this device unique. The device **10** is self-contained with the only exception of a computer with a USB port needed to view the information stored in the database on the device 10. No website or external database is required to store and retrieve information. Information can be put on the device **10** by direct input from a keyboard into the MyRECS™ software program **11**. Information can also be scanned directly to the device **10** and input from a computer on the device **10**.

[0031] Information can be ~~reimported~~ imported from over ~~25~~ twenty-five file types from various file formats ~~and has the capability to integrate to various and numerous medical software applications~~ and saved on the device **10** which can then be read by software **11** and viewed. The device 10 thus and has the capability to integrate with various and numerous medical software applications. Information can be transferred from a file on a computer to the device **10** and read. Further, information stored on the device **10** can also be copied to a patient's medical record at a physician's office or hospital reducing the chance of human error in recreating the information. The information can be created in any word processing program or spreadsheets such as Microsoft Office or Word Perfect or any text based or graphic application and copied and pasted to the software **11** or saved as a file and copied to the device ~~11~~**10** or from EMR software.

[0032] The patient's medical record may also be stored in a secured secondary site that will also permit a patient to reload their information in the event their device **10** is lost, destroyed, damaged or a larger memory device **10** is required. The backup would be provided by a Data Recovery Center (DRC).

[0033] As ~~shown~~ represented in FIG. 1, the MyRECS™ device **10** is disposed in electronic

communication with computer **17** ~~connected to the~~ via a USB port of ~~the~~ computer **17** ~~by USB cable 14~~. ~~The~~ A patient I.D./ or pass code **21** is supplied to the software **11**. Input data **22** may be scanned, keyed or downloaded into the MyRECS™ software **11**. Patient information **23**, allergies **24**, medications **25**, surgeries **26**, immunizations **27**, medical alerts **28**, conditions **29**, insurance **30**, physicians **31**, office visits **32**, and past history **33** are typical entries to the computer **17** and associated software **11**. If desired, a quick report **34** or complete report **36** may be printed or viewed on the screen of computer **17**. ~~FIG. 4 depicts such a report 34 appearing on a computer screen.~~

[0034] FIG. 2 illustrates an environment in which the device **10** may be used ~~is another illustration of how the invention works~~. The MyRECS™ device **10** both provides and receives information from the computer **17**. The computer **17** may also feed information to the printer **36**. Coupled to the computer **17** are a handheld computer **38**, a scanner **39**, a keyboard **40**, data **41** and removable storage **42**.

[0035] While the invention has been explained by a detailed description of certain specific embodiments, it is understood that various modifications and substitutions can be made in any of them within the scope of the appended claims, which are intended also to include equivalents of such embodiments.